central nervous system. The fall in temperature is gradual, and at first it may even rise higher, but in that case there are marked remissions. As an antimycotic, Professor Klebs recommends benzoate of magnesia (ʒv daily), with inhalations of a five per cent. solution of benzoate of soda, with which he would combine cold compresses for the abdomen, and occasional cold baths.—*London Med. Record*, Oct. 15, 1881.

Generation of Malaria in Flower-pots.

Prof. TOMMASI-CRUDELI pointed out recently in the *Practitioner* (Nov. 1881) that the production of malaria is not necessarily connected with the presence of marshes, ponds, etc., or with the putrefaction of organic substances; that the production of malaria ceases when the air can no longer act directly on the malarial soil, and that a very moderate degree of humidity is sufficient to produce malaria. To these points he now adds that the production of malaria is suspended when the summer is cool, and excessively warm weather may produce malaria in regions not otherwise malarial. Hence the keeping of numbers of plants in heated and imperfectly aërated rooms may cause malarial infection, even in regions where malaria is unknown. Several instances of this nature have been spoken of in the north of Europe. Prof. Eichwald of St. Petersburg communicated to Prof. Tommasi-Crudeli the following case:—

A Russian lady, who usually enjoyed good health, and who lived in a perfectly salubrious locality, was attacked by an intermittent fever of a true malarial character. The febrile attacks yielded easily to moderate doses of quinine, but a relapse invariably took place when the invalid returned to her ordinary habits of life. These alternations of easy cures and of obstinate relapses continued for many months, during which time Prof. von Eichwald was unable to discover the cause of this singular affection. One day he was struck by this circumstance: the cure of the attacks was maintained as long as the invalid remained in the bedroom, while the relapses took place when she left that room, even when she did not leave the house. Now this lady, when not suffering from fever, passed the greater part of her time in a well-heated drawing-room, containing a considerable quantity of flower-pots. Prof. von. Eichwald had them all removed, and from that day the cure was assured and no more relapses occurred.

Etiology of Malarial Fever.

Under the auspices of the National Board of Health, Dr. G. M. STERNBERG, Surgeon U. S. A., has carried on a series of observations as to the etiology of malarial fevers, with a view of testing the accuracy of the statements of Klebs and Tommasi-Crudeli.

Dr. Sternberg found a great number of minute algæ, including bacteria of various forms, upon the surface of swamp-mud in the vicinity of New Orleans, and also in the gutters within the city limits.

It is evident that the pathogenic properties acquired by gelatine solutions and other organic liquids after inoculation with bacterial organisms are due, directly or indirectly, to the presence of these bacteria, for, if they are excluded, such fluids may be kept indefinitely without undergoing change, and are innocuous beneath the skin of a rabbit.

Some of the organisms found in swamp-mud, in gutter-water, and in human saliva are capable of multiplying within the body of a living rabbit, and the fluids and organs containing them (blood, serum from cellular tissue, spleen, etc.), possess virulent properties. In other words, an infectious disease is produced which may be transmitted from animal to animal by inoculation.

Among the organisms found upon the surface of swamp-mud, near New Orleans, and in the gutters within the city limits, are some which closely resemble and, perhaps, are identical with the *Bacillus malariæ* of Klebs and Tommasi-Crudeli; but there is no satisfactory evidence that these, or any other of the bacterial organisms found in such situations, when injected beneath the skin of a rabbit, give rise to a malarial fever corresponding with the ordinary paludal fevers to which man is subject.

The evidence upon which Klebs and Tommasi-Crudeli have based their claim of the discovery of a *Bacillus malariæ* cannot be accepted as sufficient; (*a*) because in their experiments and in the author's the temperature curve in the rabbits operated upon has in no case exhibited a marked and distinctive paroxysmal character; (*b*) because healthy rabbits sometimes exhibit diurnal variations of temperature (resulting apparently from changes in the external temperature), as marked as those shown in their charts; (*c*) because changes in the spleen such as they describe are not evidence of death from malarial fever; inasmuch as similar changes occur in spleens of rabbits dead from septicæmia; (*d*) because the presence of dark-coloured pigment in the spleen cannot be taken as evidence of death from malarial fever, inasmuch as this is frequently found in the spleen of septicæmic rabbits.

While, however, the evidence upon which Klebs and Tommasi-Crudeli have based their claims to a discovery is not satisfactory and their conclusions are shown not to be well founded, there is nothing in Dr. Sternberg's researches to indicate that the so-called *Bacillus malariæ*, or some other of the minute organisms associated with it, is not the active agent in the causation of malarial fevers in man. On the other hand, there are many circumstances in favour of the hypothesis that the etiology of these fevers is connected, directly or indirectly, with the presence of these organisms or their germs in the air and water of malarial localities.

The truth or falsity of this hypothesis can only be settled by extended experimental investigations, and while further experiments upon animals may lead to more definite results, it seems probable that the *experimentum crucis* must be made upon man himself.—*Supplement No.* 14, *Nat. Board of Health Bulletin.*

Peptonuria in Acute Articular Rheumatism.

In twelve cases of acute rheumatic arithritis, R. JACKSCH detected, by Hofmeister's simple process, peptone in the urine, both after, and, indeed, during, the disappearance of the joint affection. The quantity of peptone was proportioned to the number of joints affected and the rapidity with which the joint effusion, either with or without treatment, was absorbed.

With the disappearance of the effusion the peptonuria also ceases, to appear again, however, in the repetition of the attack. The peptonuria was independent of the temperature.

It can be concluded in these cases that the peptonuria here, as was proved by Hofmeister and Maixner to be the case in the absorption of purulent effusion, pneumonic infiltrations, etc., was derived from the decomposition of the pus-cells in the effusion.

In this connection the following case is of interest:—

In a woman, aged 27, who had from youth suffered from a dermoid ovarian cyst, there occurred a sudden increase in the size of the tumour, due, as percussion revealed, to the development of gas. The patient lost strength, became extremely constipated, and was troubled with constant vomiting. Then the tumour suddenly collapsed, and the urine, which had previously contained traces of albu-